

Abstract of the Disclosure

Systems and methods for performing simple and quick real time single music note recognition algorithm based on fuzzy pattern matching are disclosed. In one aspect, the systems and methods use a 256-point FFT and fuzzy pattern identification and recognition method. The systems and methods can recognize a note as short as 0.125 seconds in a frequency range from 16Hz to 4000Hz, with 11.025KHz sampling rate and 8-bit per sampling signal. The systems and methods may be used as part of a music tutor system that receives a played note, identifies the played note, and compares the played note with a reference note. An indication may be given as to whether the played note matched the reference note.

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